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Agricultural center develops new methods

By Donna Redman
For The Journal

Michael English is an Aggie to the bone, but his curiosity leads him to investigate new ways of growing things.



English, a dynamo in blue jeans and cowboy boots, is in charge of the Agricultural Science Center in Los Lunas. He is friendly, opinionated and passionate about New Mexico agriculture and all things outdoors. The Ag Science Center is part of the New Mexico State University system, and, through a memorandum of agreement, is home to the U.S. Department of Agriculture's Natural Resources Conservation Service Plant Materials Center.

At the center, NMSU's scientists investigate everything from new varieties of plants to growing and harvesting techniques. They make their findings available to the public.

They also try to find solutions for problems facing local growers, for example which crops and varieties grow best under local growing conditions, the best way to control disease and insects, and the best time to harvest alfalfa to maintain the highest nutrition.

The Plant Materials Center staffers comb the state looking for native plants that can be adapted for use in reclamation work, mostly for mines, highways and fire-ravaged wildlands, including recent fires in the Bosque, the Cerro Grande and other recent New Mexico forest fires, as well as in home landscapes. They bring back seeds to grow and make them available to various agencies and seed producers.

Examples of native plant seed are drought tolerant plants such as black gramma grass and narrowleaf penstemon. They also collect seed and cuttings of varieties of native

cottonwoods and willows to see which are most adaptable to current conditions in the bosque.

English's curiosity about all things growing led him to explore organic farming. English said because more and more pesticides are being withdrawn from the market, the center is growing one plot using organic farming techniques. The onions were a success, but squash bugs wiped out the pumpkins.

And bugs are something English knows about.

English came from Missouri to NMSU in September 1980 as an Extension Service entomologist. He is an expert on insects. His job is to extend that knowledge to the public.

The Extension Service, English said, is a part of all land grant universities, and NMSU is a land grant university. During the post Civil War reconstruction, each state and territory in the Union was given a land grant to establish a college or university devoted to education and research pertaining to agriculture, mechanical arts or engineering, and military training.

In 1914, Congress decided that because these colleges and universities are funded with public money, they needed to give something back by extending the information they gather through research to the public. Thus the Extension Service was founded in 1914 and eventually expanded to include youth development, through 4-H clubs and home economics.

Every county in the state has an Extension Service office, and Extension staff are considered faculty members at NMSU, English said.

English earned his bachelor's degree in animal science reproductive physiology, a master's degree in economic entomology and a Ph.D. studying the degradation of pesticides in mineral soils in Missouri.

"Then I came here," English said. "I had three job offers, one at Ohio State, one at Mississippi State, and one here, at New Mexico State.

"I liked the West, liked the people I met here. I feel like I'm a New Mexican."

That same year, which was 1980, English and two other Extension Service staffers, Jim Sais and Emroy Shannon, started the state's first Master Gardener program in Bernalillo County.

The program offers comprehensive classes in gardening in exchange for a nominal fee and 40 hours of volunteer work doing things like staffing the Master Gardener Hotline to answer home growers' questions. The program has since spread to other counties in the state.

English spent a year as Agricultural Communications department head, then took a job heading the university's Extension Plant Science Department. In March 1998 he became superintendent of the Ag Science Center.

English lives in Bosque Farms on an acre of land covered with more than a hundred rose bushes and several hundred trees. He said he keeps finding new roses he wants to try, so he sticks them in the ground.

"I'm an Aggie and it's been both my vocation and my avocation, I guess, my entire life," he said.

At the center, English divides his time among administration, agricultural research and the Extension Service.

English said there are 10 NMSU research centers throughout the state. Some deal with specific areas, such as sheep or cattle. The Los Lunas facility deals mostly with agricultural crops and native plants.

"We work over a five- or six-county area. We do some things statewide, but most things apply to local growing conditions," English said.

Scientists at the center are investigating a mite that attacks and decimates only bindweed, a scourge for farmers throughout the Southwest. If tests go as expected and if other effects on the environment turn out to be minimal, the tiny mite could control bindweed without using chemicals.

And in cooperation with the New Mexico Wine and Vine Society, they are growing a test plot of grape varieties never before grown here.

The list of research projects goes on and on.

English said working with the Plant Materials Center staff has broadened his outlook on agriculture, making him consider other things besides commercial crops.

"Our mission is to do research that's pertinent to the people here locally and in surrounding counties, and to bring research-based information to help people," English said.

They bring that information to the public through programs such as Master Gardeners and 4-H clubs and their broad scope of activities. They offer classes, produce radio and TV programs, publish brochures and books, and host events like the upcoming Field Day.

"We're a niche agriculture for the most part in New Mexico. We don't impact the national agriculture food basket very much, but we do grow some high quality stuff," he added.

"We grow the best green chile in the world."



Agricultural Science Center: Welcomes, Educates Public

To show the public just what the Agricultural Science Center is about, the center is hosting its annual Field Day on Thursday.

There will be tours, demonstrations and a free lunch.

The tours include alfalfa harvest time trials, plots of cover crops, plots of various grasses with potential for specialized uses and the grape variety test plot.

There will be discussions about growing cover crops, planting trees, coping with biting flies that can make life miserable in the summer and establishing a new vineyard, weed control and rivers.

Also there will be a discussion of Millennium gardens, which are community gardens grown to share a portion of the produce with the hungry.

Once the center finishes weighing and measuring the fruit and vegetables it grows to satisfy research requirements, the center gives the remaining produce to the Roadrunner Food Distribution Center in Albuquerque. The part of the center that grows food qualifies as a Millennium Garden.

Demonstrations include tractor maintenance and elements of sustainable water and water quality.

From 8:30 a.m. to 9:30 a.m., Dr. Rikia Park will talk about pets and heartworms.

From 9:30 a.m. to 10:30 a.m., Valencia County Extension Home economist Carolyn Wilson will talk about using locally grown vegetables.

From 10:30 a.m. to 11:30 a.m., Bernalillo County, Extension Home Economist Patricia Aaron will show how to make flavored vinegars.

After lunch, attendees can bring plants, insects or diseased plants for identification and recommendations at the Plant Clinic.

IF YOU GO

WHAT: Field day

WHEN: 8 a.m. to 3 p.m. Thursday Registration begins at 8 a.m. Lectures, demonstrations and tours start at 9:00 a.m.

WHERE: NMSU Agricultural Science Center and the USDA-Natural Resources Conservation Service Plant Materials Center

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